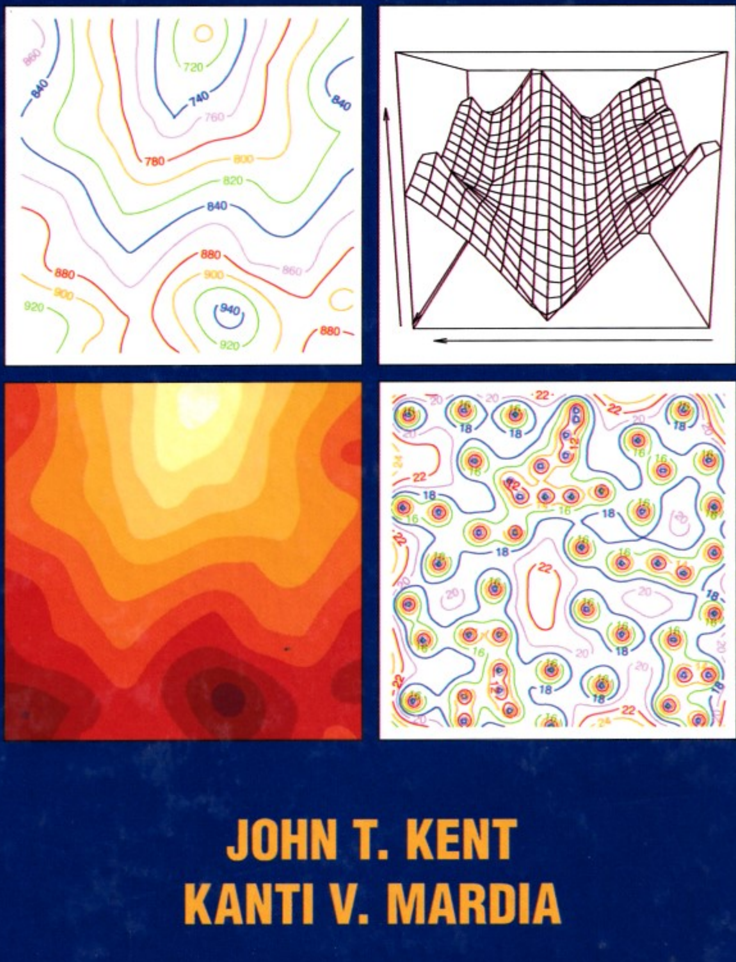
Wiley Series in Probability and Statistics

SPATIAL ANALYSIS



JOHN T. KENT
KANTI V. MARDIA

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Contents

Explore the foundations and latest developments in spatial statistical analysis

In *Spatial Analysis,* two distinguished authors deliver a practical and insightful exploration of the statistical investigation of the interdependence of random variables as a function of their spatial proximity. The book expertly blends theory and application, offering numerous worked examples and exercises at the end of each chapter.

Increasingly relevant to fields as diverse as epidemiology, geography, geology, image analysis, and machine learning, spatial statistics is becoming more important to a wide range of specialists and professionals. The book includes:

- Thorough introduction to stationary random fields, intrinsic and generalized random fields, and stochastic models
- Comprehensive exploration of the estimation of spatial structure
- Practical discussion of kriging and the spatial linear model.

Spatial Analysis is an invaluable resource for advanced undergraduate and postgraduate students in statistics, data science, digital imaging, geostatistics, and agriculture. It's also an accessible reference for professionals who are required to use spatial models in their work.

John T. Kent is a Professor in the Department of Statistics at the University of Leeds, UK. He began his career as a research fellow at Sidney Sussex College, Cambridge before moving to the University of Leeds. He has published extensively on various aspects of statistics, including infinite divisibility, directional data analysis, multivariate analysis, inference, robustness, shape analysis, image analysis, spatial statistics, and spatial-temporal modelling.

Kanti V. Mardia is a Senior Research Professor and Leverhulme Emeritus Fellow in the Department of Statistics at the University of Leeds, and a Visiting Professor at the University of Oxford. During his career he has received many prestigious honours, including in 2003 the Guy Medal in Silver from the Royal Statistical Society, and in 2013 the Wilks memorial medal from the American Statistical Society. His research interests include bioinformatics, directional statistics, geosciences, image analysis, multivariate analysis, shape analysis, spatial statistics, and spatial-temporal modelling.

Kent and Mardia are also joint authors of a well-established monograph on Multivariate Analysis.

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